

### **REMARKS**

Claims 1, 5-7, 13, 15, 19-21 and 23 are pending in the application. By this Amendment, Claims 1, 5-7, 13, 15, 19-21 and 23 are amended, and Claims 2-4, 8-12, 14, 16-18, 22 and 24 are canceled without prejudice or disclaimer of the subject matter contained therein. Favorable reconsideration is respectfully requested in light of the following Remarks.

The Office action rejects Claims 1-3, 5, 10, 13-17, 19, 22 and 23 under 35 U.S.C. 102(b) over Feldman (U.S. Patent Application Pub. No. 2003/0195831, hereinafter "Feldman"), and Claims 4, 6-9, 11, 12, 18, 20, 21 and 24 under 35 U.S.C. 103(a) over Feldman in view of Eklund ("Multiobjective Visible Spectrum Optimization: A Genetic Algorithm Approach", hereinafter "Eklund"). The rejections are respectfully traversed.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference. *See MPEP §2131.*

According to *MPEP §2143*, to establish a *prima facie* case of obviousness, three criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. *In re Linter*, 458 F.2d 1013, 173 USPQ 560, 562 (CCPA 1972). Second, there must be a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Finally, the applied reference must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

By this Amendment, Claims 1, 15 and 23 are amended to specify, *inter alia*, the features of:

generating a non-dominated solution set comprising a first efficient frontier in a portfolio performance space having at least three-dimensions using one of an evolutionary algorithm and optimization processing by using a computing device;

identifying at least one region having a gap in the at least three-  
dimensions of the first efficient frontier using a visualization tool;  
interactively placing at least one target in the at least one region using  
the visualization tool; and  
generating supplemental solutions to the first efficient frontier using a  
Target Objectives Genetic Algorithm (TOGA) to create a second efficient frontier, the  
second efficient frontier being used investment decisions.

Support for these features of the claimed invention can be found, for example, in  
Paragraphs [00190]-[00194] and Figures 2, 3, 8 and 12.

It is respectfully submitted that there is no mention in the applied art of at least  
one of these features of the claimed invention. For example, there is no mention in the  
applied art of at least the feature of interactively placing at least one target in the at least  
one region using a visualization tool.

Feldman discloses a gap filling step by adding portfolios that are linear  
combinations of portfolios already on the resampled efficient frontier. In one  
embodiment, an arbitrary number of portfolios may be added by dividing the interval  
between zero and one into  $n$  equally spaced values, and then constructing  $n$  portfolios  
using a vector operation. *See Paragraph [0056].*

Eklund discloses a TOGA for multi-objective visible spectrum optimization.

Contrary to Paragraph 10 the Office action, Feldman does not teach placing  
targets in the areas of the gaps, let alone interactively placing at least one target in at  
least one region using a visualization tool, as recited in Claims 1, 15 and 23.

Applicant agrees with Paragraph 15 of the Office action that there is no mention  
in Feldman of using TOGA in a gap filling process. However, Applicant disagrees with  
the Office action that Eklund teaches using the gap filling process as a TOGA process.  
To the contrary, there is no mention in Eklund of using TOGA in a gap filling process.  
The gap filling process of Feldman uses a linear combination of portfolios, and to  
modify the gap filling process of Feldman with the TOGA of Eklund would be an  
impermissible use of hindsight reconstruction from Applicant's disclosure.

Because the applied art, taken singly or in combination, does not disclose, teach or suggest all the claim limitations, Claims 1, 15 and 23 are neither anticipated nor rendered obvious by Feldman and Eklund.

For at least this reason, Claims 1, 15 and 23 are allowable over the applied art, taken singly or in combination. Claims 5-7 and 13, which depend from Claim 1, and Claims 19-21, which depend from Claim 15, are likewise allowable over the applied art, taken singly or in combination.

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance of the application is earnestly solicited.

Should Examiner Wong believe anything further would be desirable in order to place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney at the telephone number listed below.

It is believed that any additional fees due with respect to this paper have already been identified. However, if any additional fees are required in connection with the filing of this paper, permission is given to charge account number 07-0868 in the name of General Electric Company.

1 August 2008

Respectfully submitted,

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